

components. The resultant contact line area 725 is smaller than the flat surface rubbing contact 15 shown in Figure 1 and thus substantially reduces friction wear between the pivot rod 320 and the valve bridge 310. Additionally, the pivot rod chamber 315 has a divot or dimple 417 at the pivot rod chamber bottom 415 which will hold engine oil or some other lubricant to provide lubrication between the pivot rod 320 and the valve bridge 310. The lubrication between the pivot rod bottom 425 and the pivot chamber bottom 415 further reduces friction wear between the pivot rod 320 and the valve bridge 310.

In the Claims:

Please cancel claim 10 without prejudice or disclaimer.

1. (Amended) A valve actuation linkage mechanism for use in an internal combustion engine comprising:

a rocker arm having a pivot rod cup;

[a pivot rod; and]

a valve bridge having a pivot rod chamber; and

a pivot rod comprising a pivot rod head, wherein at least a part of the pivot rod head pivots within the pivot rod cup, and comprising a pivot rod body, wherein at least a part of the pivot rod body pivots in the pivot rod chamber.

8. (Amended) A valve actuation linkage mechanism for use in an internal combustion engine comprising:

a rocker arm having a pivot rod cup;

a pivot rod;

a pivot rod retainer; [and]

a valve bridge having a pivot rod chamber;

a middle valve bridge section having the pivot rod chamber and at least one adjacent pivot rod retainer securing bore; and  
a bottom valve bridge section.